

REMARKS

Claims 1, 3-5, 7, 8 and 12 are pending. By this Amendment, claim 3 is amended and claim 11 is cancelled. Support for the amendments to claim 3 can be found, for example, at paragraphs [0039] and [0076]-[0077] of the instant specification. No new matter is added. In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance (for the reasons discussed herein); (b) do not raise any new issue requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution); (c) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (d) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

Interview

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Ildebrando in the March 29, 2004 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

Rejections Under 35 U.S.C. §112, First Paragraph

The Office Action rejects claims 1, 3-5, 7, 8, 11 and 12 under the written description requirement of 35 U.S.C. §112, first paragraph. Claim 11 has been cancelled, thus rendering the rejection moot as to that claim. As to the remaining claims, Applicants respectfully traverse the rejection.

The Office Action asserts that there is not adequate support in the specification as filed for the limitation "wherein the HC-adsorbent layer includes no noble metal" in claim 1.

However, Embodiment 3, described at [0058]-[0061] of the instant specification, clearly discloses an HC-absorbent layer that does not include noble metals. Moreover, viewing Table 1 at page 25 of the instant specification, it is apparent that Embodiment 3 provides superior HC-purification relative to other embodiments in which the HC-absorbent layer includes noble metals. Accordingly, the instant specification describes an HC-absorbent layer that is free from noble metals and extols the superior performance of such a layer. The above-cited portions of the instant specification clearly convey that Applicants were fully in possession of the invention of claim 1 at the time of filing.

The Office Action asserts that there is not adequate support in the specification as filed for the limitation "a lower catalyst layer which is composed of a porous carrier carrying only Pd and excluding all other noble metals" in claim 3. Claim 3 has been amended to provide "a lower catalyst layer which is composed of a porous carrier carrying only Pd and excluding Pt and Rh." The instant specification describes a particular embodiment (Embodiment 10 at [0076]-[0081]) in which Pd, but not Pt and Rh, are provided in the lower catalyst, and further provides test results showing the efficacy of that embodiment.

Moreover, the instant specification describes the general benefits of including Pd and excluding Pt and Rh in the lower catalyst layer. For example, the instant specification states that by carrying Pd in the lower catalyst layer and away from Pt and Rh in the upper catalyst layer, Pd is protected from the ravages of heat, and thus does not coat and reduce the effectiveness of Pt and Rh in the upper catalyst layer. See instant specification at [0039]. Accordingly, the instant specification provides specific examples of catalysts including a lower catalyst layer that is composed of a porous carrier carrying Pd, but not Pt and Rh, and further describes generally why such an arrangement is advantageous. The above-cited portions of the instant specification clearly convey that Applicants were fully in possession of the invention of claim 3 at the time of filing.

For the foregoing reasons, Applicants submit that each of the pending claims is adequately supported by the instant specification, and thus respectfully request reconsideration and withdrawal of the rejection.

Rejection Under 35 U.S.C. §102(b)

The Office Action rejects claims 3-4 and 11-12 under 35 U.S.C. §102(b) over U.S. Patent No. 6,047,544 to Yamamoto et al. ("Yamamoto"). Claim 11 has been cancelled, thus rendering the rejection moot as to that claim. As to the remaining claims, Applicants respectfully traverse the rejection.

Yamamoto does not disclose each and every element of claim 3. Claim 3 recites "[a] catalyst for purifying exhaust gases, comprising: a substrate having heat resistance; an HC-adsorbent layer comprising zeolite formed on a surface of said substrate, wherein said zeolite consists of β -type zeolite; a lower catalyst layer which is composed of a porous carrier carrying only Pd and excluding Pt and Rh, and is formed on a surface of said HC-adsorbent layer; and an upper catalyst layer which is composed of a porous carrier carrying Pt and Rh, and is formed on a surface of said lower catalyst layer; wherein Pt and Rh are carried on the same porous carrier" (emphasis added). Yamamoto does not anticipate such a catalyst.

The Office Action asserts that Yamamoto discloses a catalyst composition comprising a substrate, a hydrocarbon adsorbent layer comprising β -zeolite, a second layer comprising palladium, cerium oxide and alumina, and a third layer comprising rhodium, alumina and cerium oxide. The Office Action further asserts that Yamamoto discloses that platinum may be added to the third layer. Notwithstanding these assertions, Yamamoto does not teach each and every element of claim 3.

Yamamoto does not disclose an upper catalyst layer which is composed of a porous carrier carrying Pt and Rh, formed on a surface of a lower catalyst layer wherein Pt and Rh are carried on the same porous carrier. While Yamamoto may disclose that it is desirable to

add Pt to a second or third catalyst layer (C6/L66-67), Yamamoto never discloses that Pt should be included along with Rh in the third layer and that both Pt and Rh should be carried on the same carrier. Rather, in every instance in Yamamoto where Pt and Rh are included in the same catalyst layer, each is carried by a different carrier. For example, in each of Samples 17, 19 and 23, Rh is carried on alumina while Pt is carried on zirconium oxide. C17/L23-24, 54-57; C18/L43-45. Moreover, an upper catalyst layer including Pt and Rh carried on the same carrier provides superior heat resistance relative to layers such as in Yamamoto where Pt and Rh are carried on separate carriers. As Yamamoto does not disclose an upper catalyst layer including Pt and Rh carried on the same porous carrier, Yamamoto does not disclose each and every element of claim 3.

Yamamoto does not anticipate claim 3. Claims 4 and 12 depend from claim 3, and thus also are not anticipated by Yamamoto. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3-5, 7, 8 and 12 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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